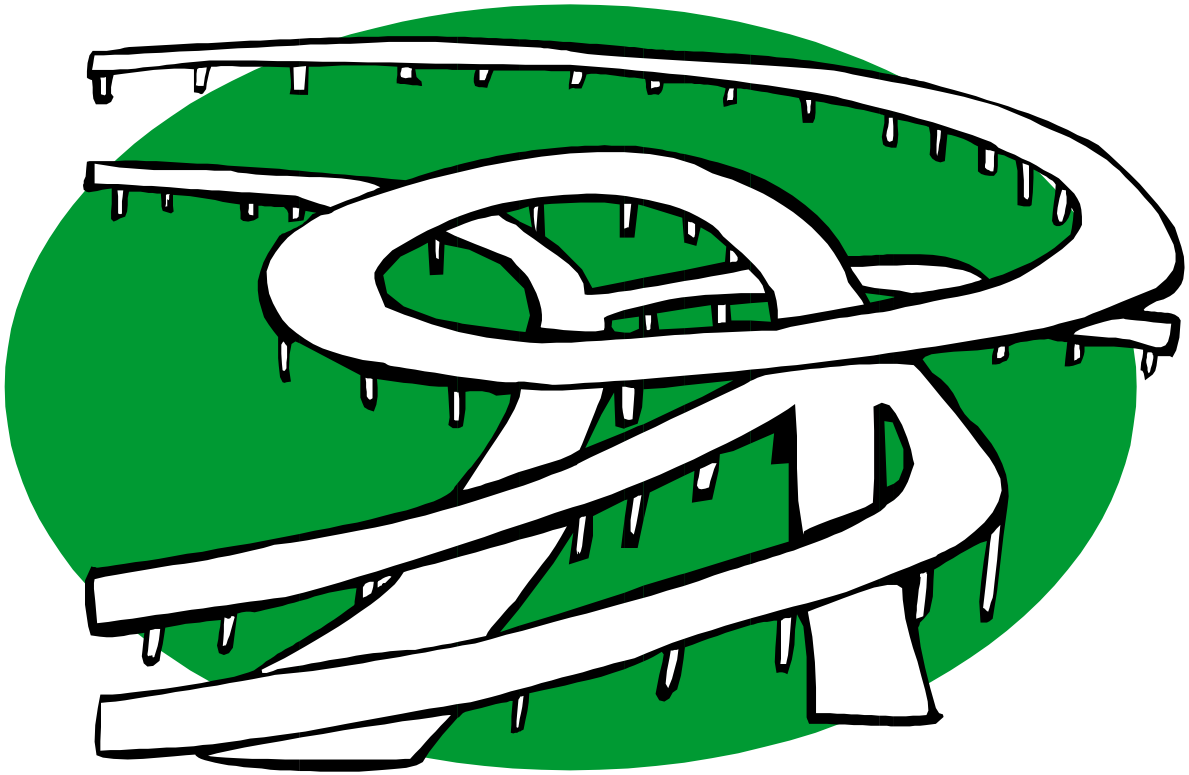
Chapter 5

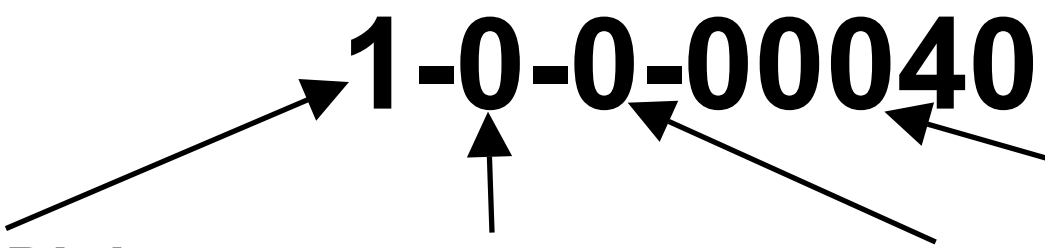
Routes

(inventoried, coinciding, high order, dummy)



8-Digit Code (Review)

The 8-digit code specifies state-maintained primary and secondary routes, local routes, and political boundaries (municipal, county, and state).



First Digit

Route/Boundary Type

1 - Interstate
2 - US Route
3 - NC Route
4 - Secondary Route
5 - City Street (LCL)
6 - Non-System
7 - County Boundary
8 - State Boundary
9 - Municipal Boundary

Second Digit

Special Route Type

0 - None
1 - Alternate
2 - Connector
3 - North
4 - South
5 - East
6 - West
7 - Spur
8 - Truck
9 - Business

Third Digit

Couplet Direction

0 - Not a couplet
3 - Northbound
4 - Southbound
5 - Eastbound
6 - Westbound

Last 5 Digits

Route/Boundary #

This is the route/ boundary number (lef padded with zeros).

8-Digit Code Exercise

What is the 8-digit code for NC 87 ?

What type of feature is described by the 8-digit code of 80000006 ?

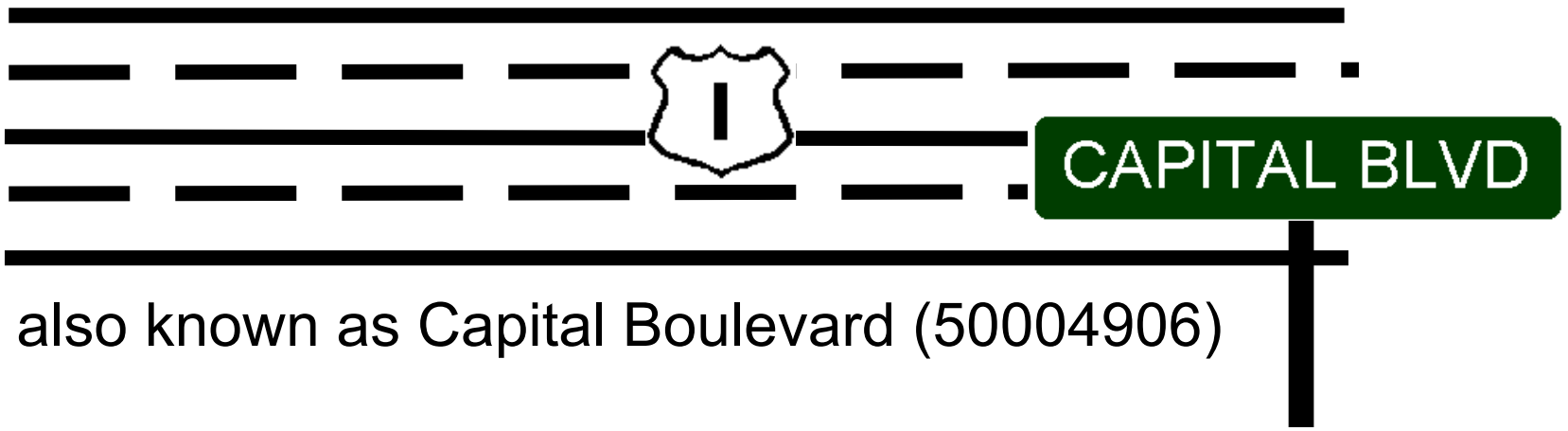
What type of route is defined by the 8-digit code of 40001010 ?

What is the 8-digit code for US 1 Alternate?

Coinciding Routes

Routes that follow the same section of pavement as other routes:

US 1 (20000001) in Raleigh ...



…….is also known as Capital Boulevard (50004906)

Therefore, <u>Capital Boulevard</u> is a coinciding route with <u>US 1</u>, AND <u>US 1</u> is a coinciding route with <u>Capital Boulevard</u>.

Coinciding Routes (cont.)

- Many routes are designated by both a state route number and a local name.
- **Always** check for coinciding routes.
- The analyst can get the 8-digit code for the local route name from the “Feature Names and Secondary Routes” component of TEAAS.
- It is imperative in crash analyses to know if the study route has a local name attached to it.
- ***KNOW YOUR LOCATION!!!!***

Coinciding Routes Examples

Local Route Name - Primary Route Number
(Capital Boulevard - US 1)

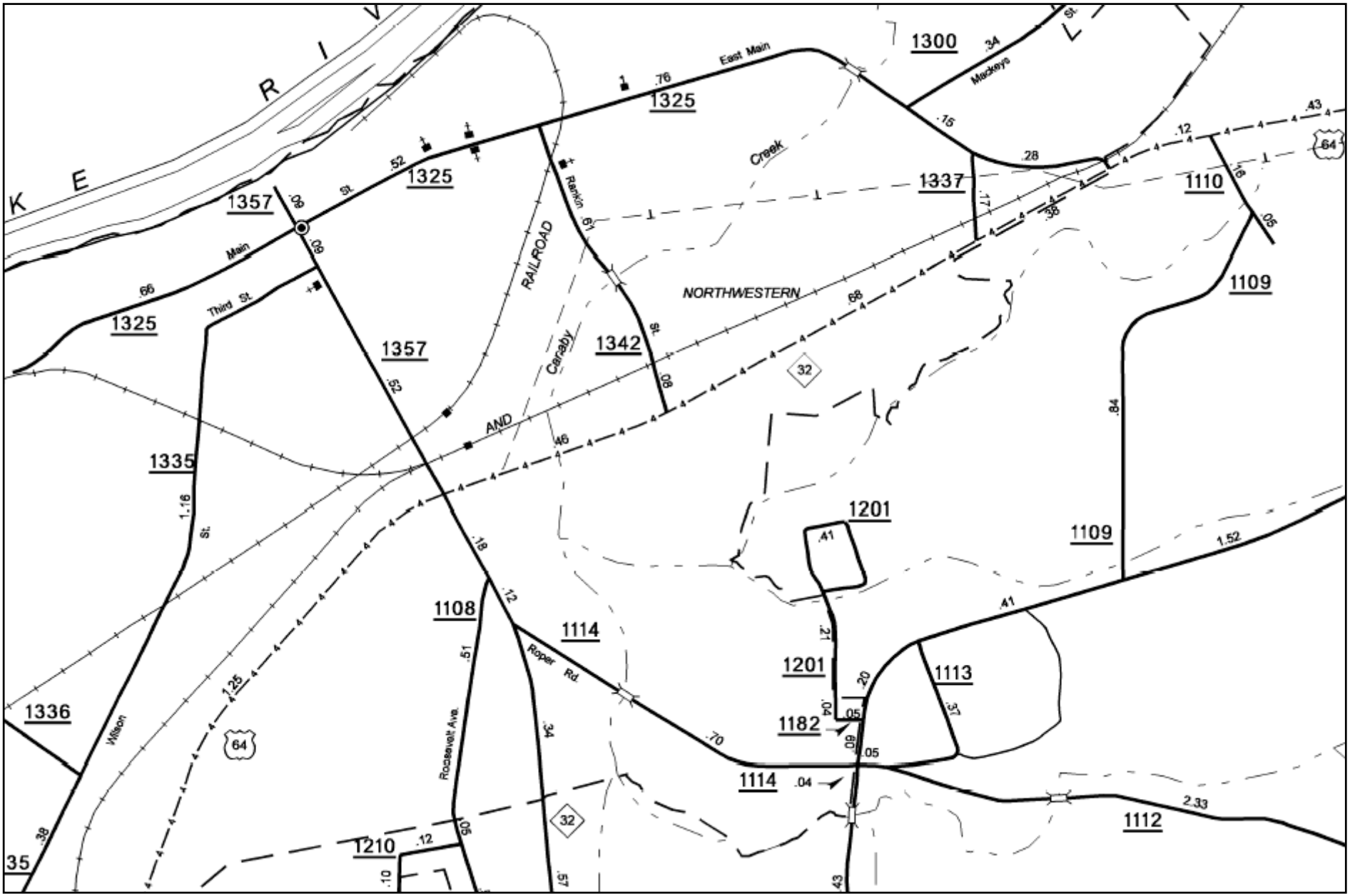
Local Route Name - Secondary Route Number
(Third Street - SR 1335)

Possible to have more than two coinciding routes:

Local Route Name - Multiple Route Numbers
(Capital Boulevard - US 1 - US 401)

KNOW YOUR LOCATION!!!!

Coinciding Routes Exercise



Coinciding Routes Exercise

What is a coinciding route of Roosevelt Ave ?

What is a coinciding route of SR 1335 ?

What is a coinciding route of parts of NC 32 ?

High Order Routes

- In coinciding route situations, one of the routes is considered to be the highest order route (HOR)

- The lower the 8-digit code, the higher its order

- Used by the CRASH database to give each crash a HOR milepost (if the coinciding routes are mileposted)

- Crashes are not always reported using the HOR

- Crashes are always mileposted using the HOR (if the coinciding routes are mileposted)

High Order Route Examples

I 40 > I 440 > US 1 > NC 49 > SR 1001

Since:

10000040 < 10000440 < 20000001 <

30000049 < 40001001

High Order Route Exercise

What is the highest order route between coinciding routes Roosevelt Avenue and SR 1108 ?

What is the highest order route between coinciding routes NC 45 and NC 32 ?

What is the highest order route between coinciding routes US 29 Business and US 64 ?

High Order Route Segments

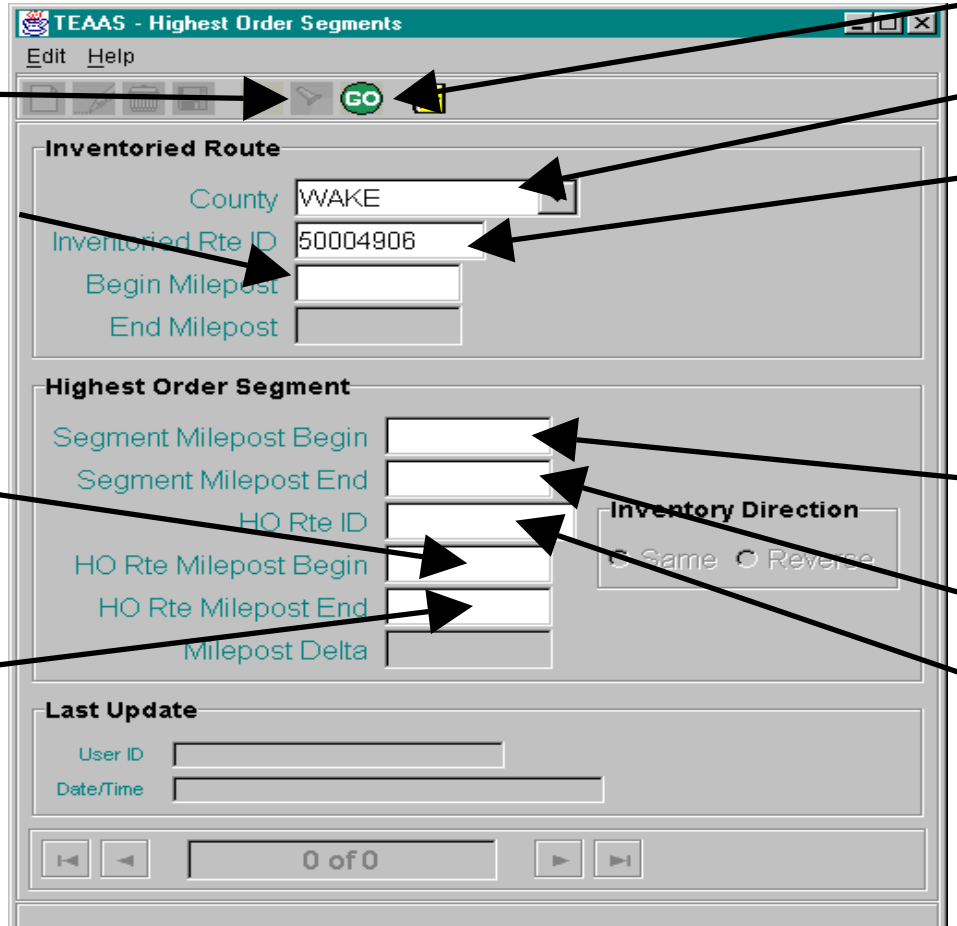
- Used to determine the Highest Order Route (HOR) on coinciding routes
- ***Review: In a coinciding route situation, the highest order route is the route that has the lowest 8-digit code along that segment***
- A particular road can have several different segments with different high order routes
- Access the highest order segments by selecting the following:

⇒ Highest Order Segments

High Order Route Segments (cont.)

To search for Highest Order Routes:

- Click the "**Search**" icon
- Enter the search criteria
- Leave any criteria blank if they are not part of the search
- Click the "**GO**" icon



"**GO**" icon

Search" icon

Specify Name of County

8-digit road code of the route (wildcard characters may be used to search for one or more inventoried routes - refer to *Appendix D* for a description on the use of wildcard characters)

eginning Milepost of the Route

Beginning milepost of the high order segment

Beginning milepost of the route segment

Ending milepost of the route segment

nding milepost of the high order route is not allowed as search criteria

8-digit road code of the high order route (wildcard characters may be used to search for one or more high order routes - refer to *Appendix D* a description on the use of wildcard

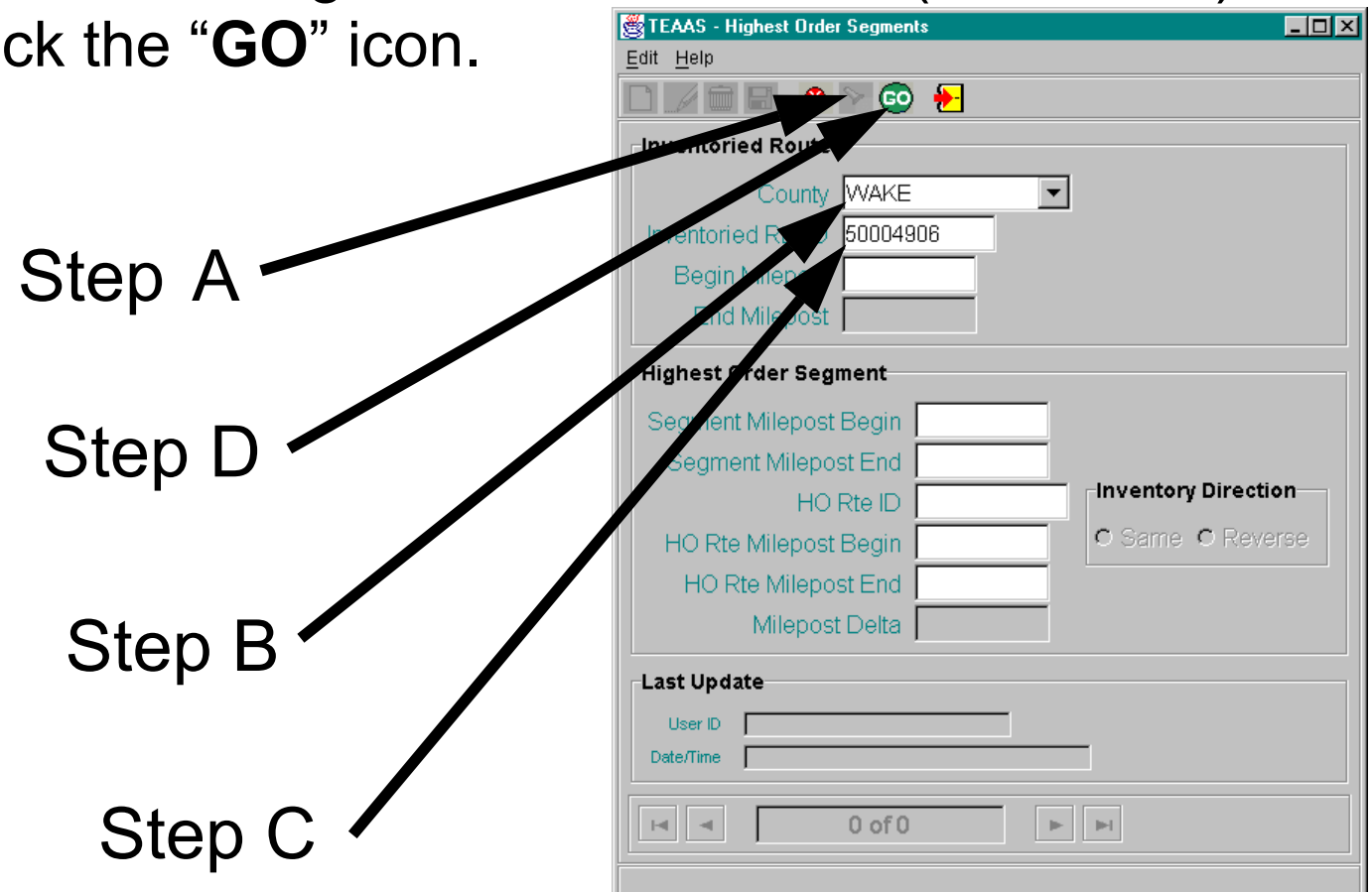
High Order Route Segments (cont.)

- Click the "**OK**" button on the records retrieved dialog box to view the records retrieved
- If no records are returned, verify that the search criteria are correct
- A new search may be executed by adjusting the search criteria and clicking the "**GO**" icon
- TEAAS will display a maximum of 500 records for any given search (although more than 500 records may actually meet the search criteria)

High Order Route Segments Example

Suppose you wanted to find all high order routes coinciding with Capital Boulevard (50004906) in Wake County...

Step A: Click on the "**Search**" icon
Step B: Enter the county name (Wake)
Step C: Enter the 8-digit code for the route (50004906)
Step D: Click the "**GO**" icon.

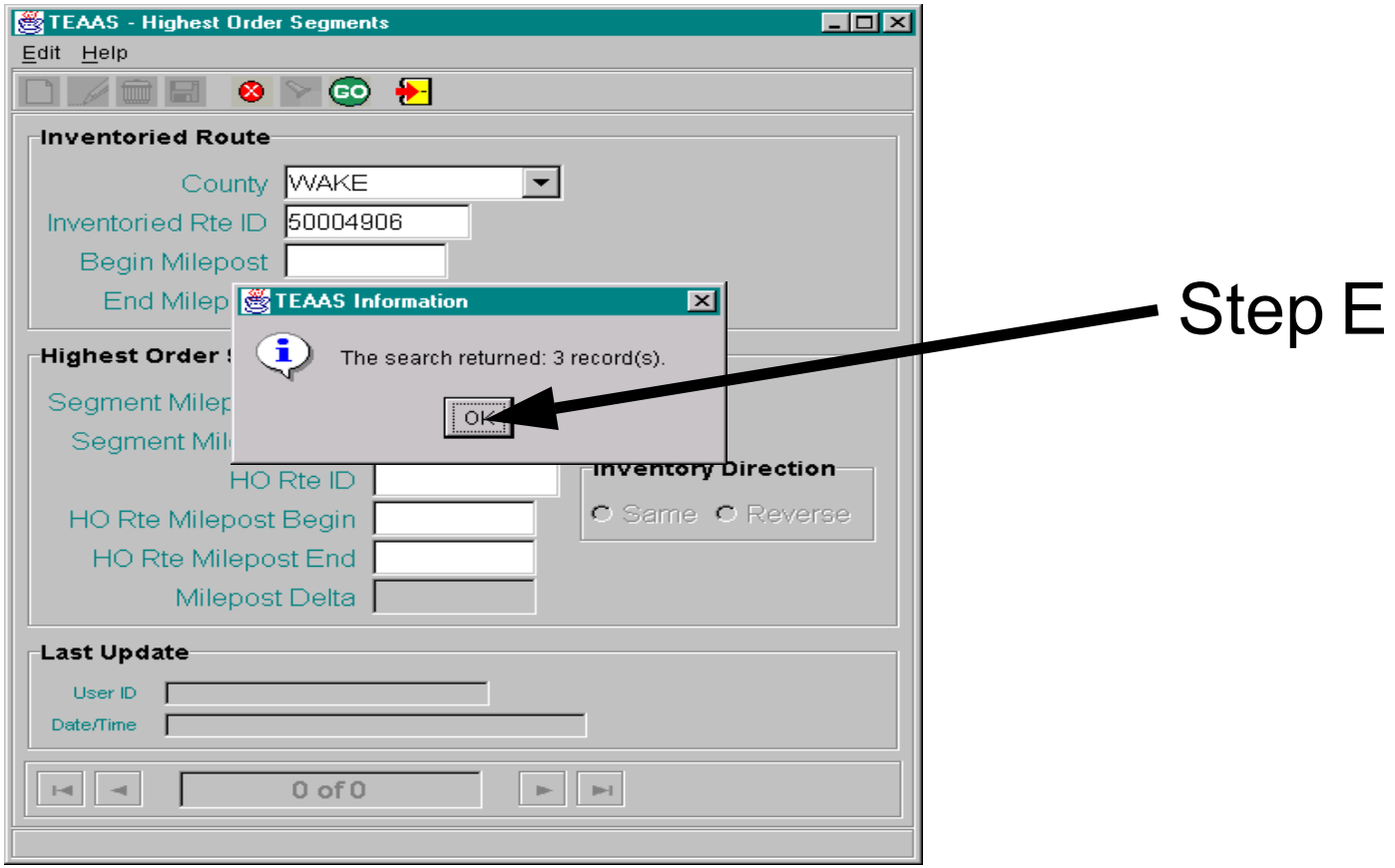


High Order Route Segments Example

You should get a dialog box that reads

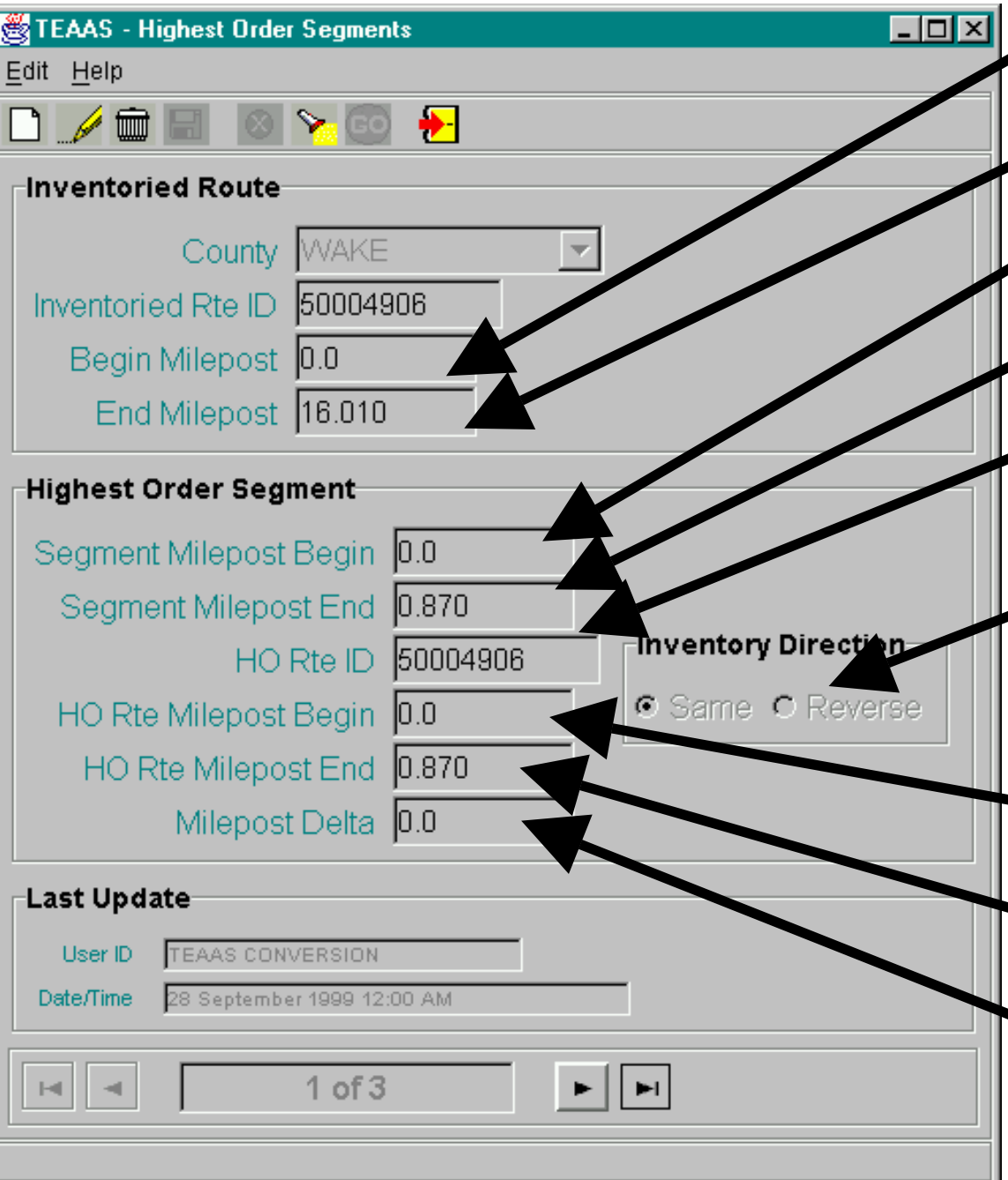
"The search returned: 3 record(s)"

Step E: Click on the "**OK**" button and view the high order records



If the dialog box reads "**The search returned: 0 record(s)**" it means that TEAAS could not find the route you entered in its list of high order routes (check your search criteria to verify that it was entered correctly).

High Order Route Segments Screen



Beginning milepost for 50004906

Ending milepost for 50004906

Beginning milepost for this segment of 50004906

Ending milepost for this segment of 50004906

High order route ID for this segment of 50004906

Indicates whether the direction of the mileposting of the high order route matches the direction of the inventoried route for this segment

Beginning milepost for the high order route for this segment of 50004906

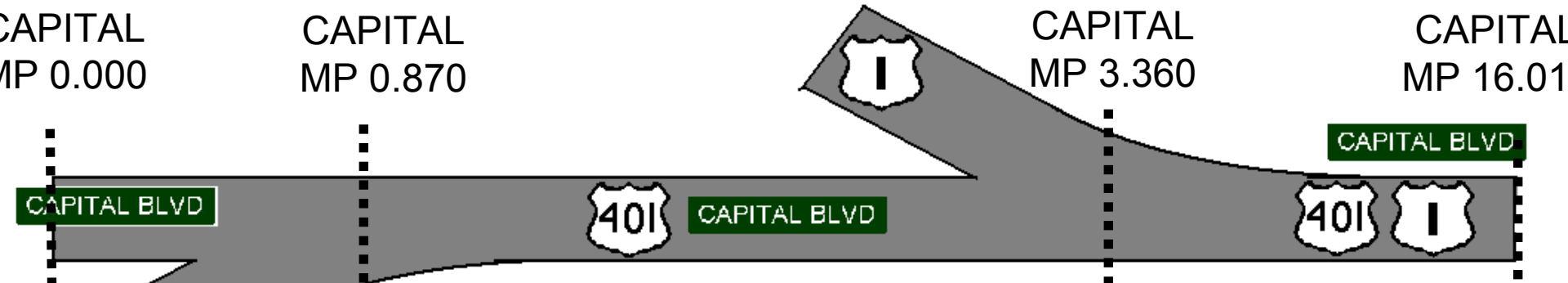
Ending milepost for the high order route for this segment of 50004906

Milepost delta (used to convert the milepost of crashes on a low order route to the milepost of the high order route)

High Order Route Segments Report (Visual Representation)

County	Inventoried Route ID	Begin Milepost	End Milepost
WAKE	50004906	0.0	16.01

Segment Begin MP	Segment End MP	Segment HO Route	HO Route Begin MP	HO Route End MP	Inventoried Direction	MP Delta
0.000	0.870	50004906	0.000	0.870	Same	0.000
0.870	3.360	20000401	22.990	25.480	Same	22.120
3.360	16.010	20000001	27.030	39.680	Same	23.670



Inventoried Routes

- Inventoried routes are routes that are currently recorded in TEAAS

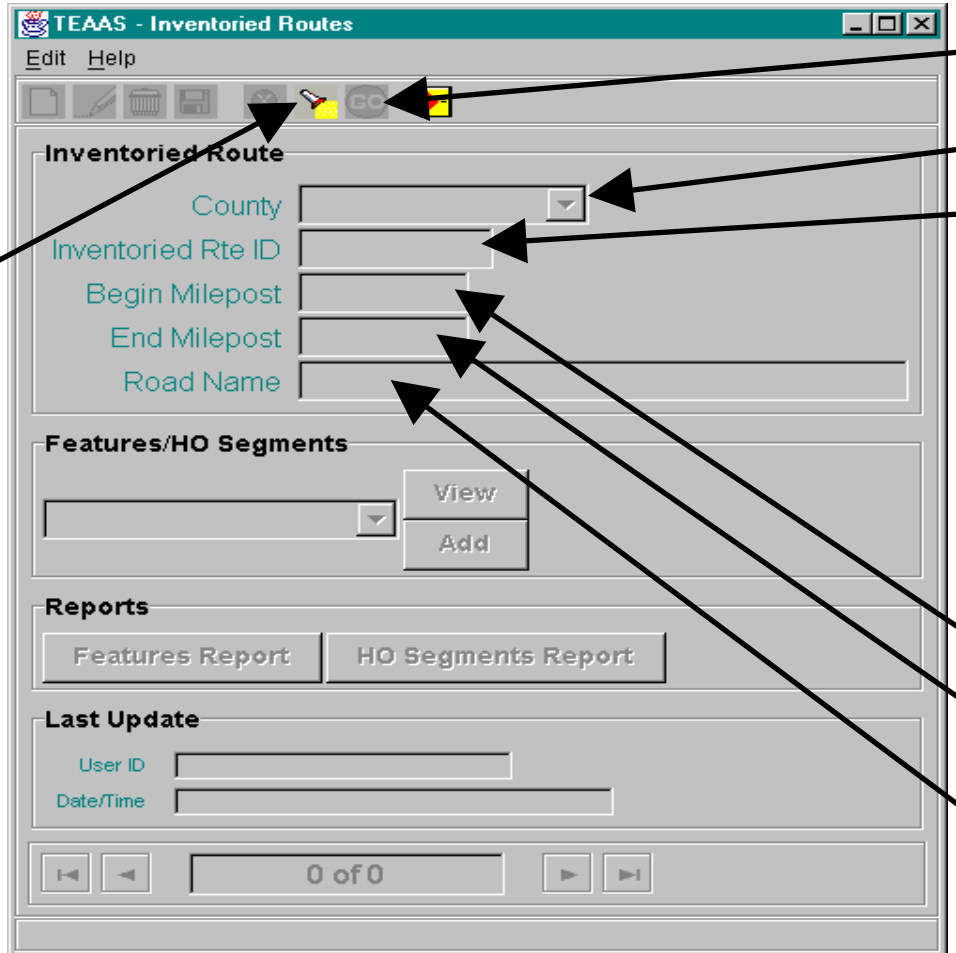
- Access inventoried routes by selecting the following:

⇒ Inventoried Routes

Inventoried Routes (cont.)

To search for Inventoried Routes

- Click the "**Search**" icon
- Enter search criteria
- Leave any criteria blank if they are not part of the search
- Click the "**GO**" icon



Search Icon

"**GO**" icon

Specify the county name

Specify the 8-digit road code (wildcard characters may be used to search for one or mor Inventoried road codes). Refe to *Appendix D* for a descriptio on the use of wildcard characters.

Specify the beginning milepos

Specify the ending milepost

Road Name is not allowed as search parameter

Inventoried Routes (cont.)

- Click the "**OK**" button on the records retrieved dialog box to view the identified records

- If no records are returned, verify that the search criteria are correct

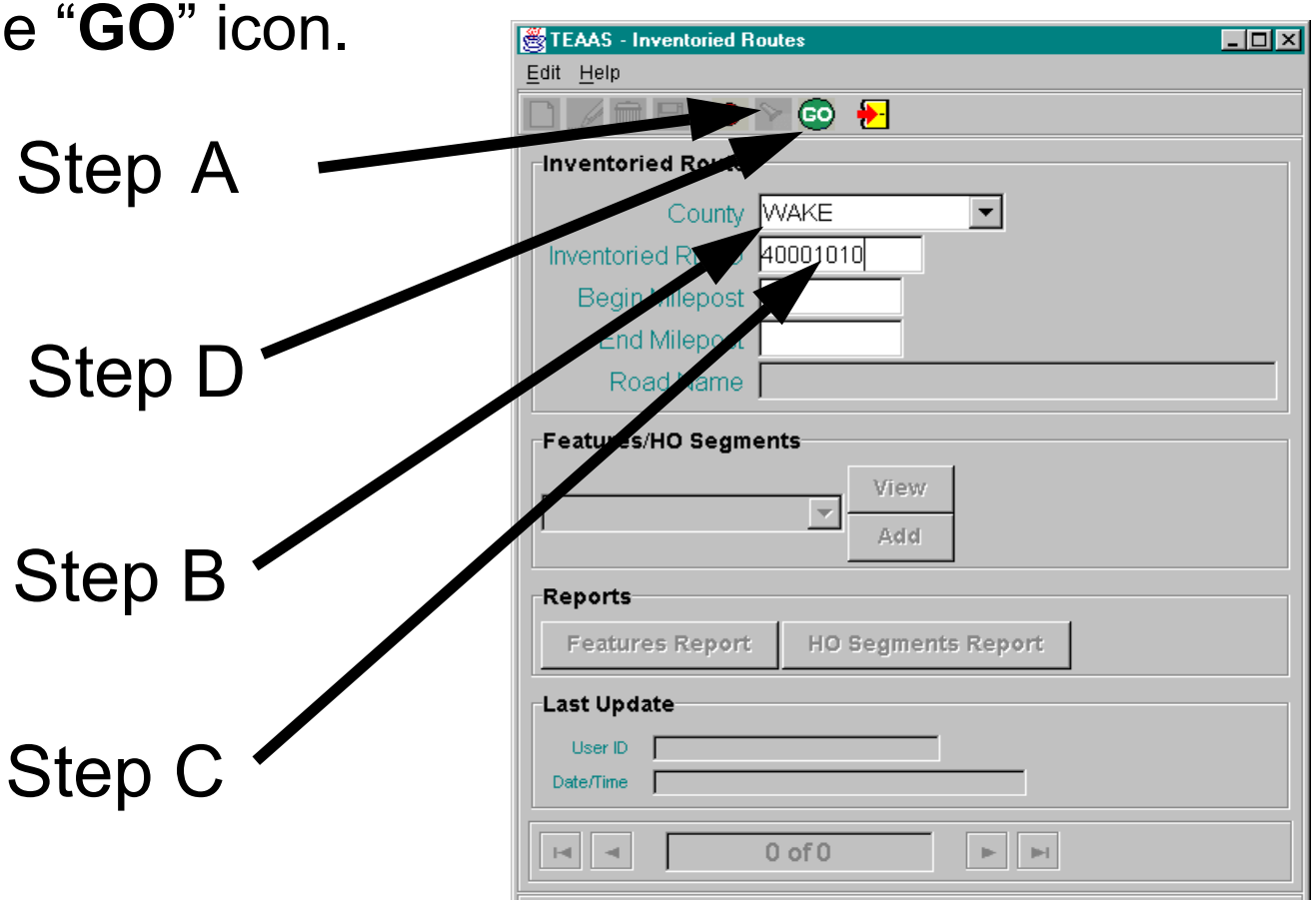
- A new search may be executed by adjusting the search criteria and clicking the "**GO**" icon

- TEAAS will display a maximum of 500 records for any given search (although more than 500 records may actually meet the search criteria)

Inventoried Routes Example

Suppose you wanted to find out if SR 1010 in Wake County is an inventoried route...

Step A: Click on the "**Search**" icon
Step B: Enter the county name (Wake)
Step C: Enter the 8-digit code for the route (40001010)
Step D: Click the "**GO**" icon.

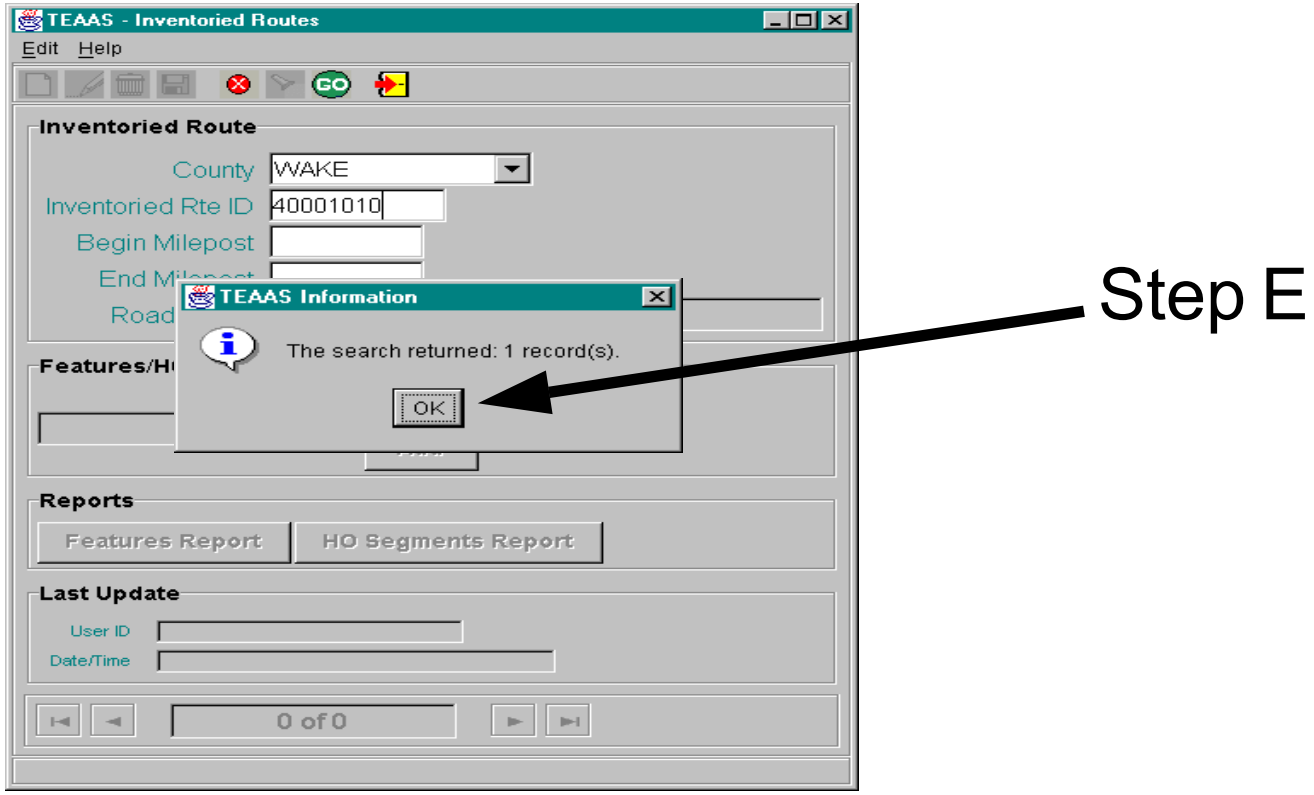


Inventoried Routes Example (cont.)

You should get a dialog box that reads

"The search returned: 1 record(s)"

Step E: Click on the "**OK**" button



If the dialog box reads "**The search returned: 0 record(s)**" it means that TEAAS could not find the route you entered in its list of inventoried routes (check your search criteria to verify that it was entered correctly).

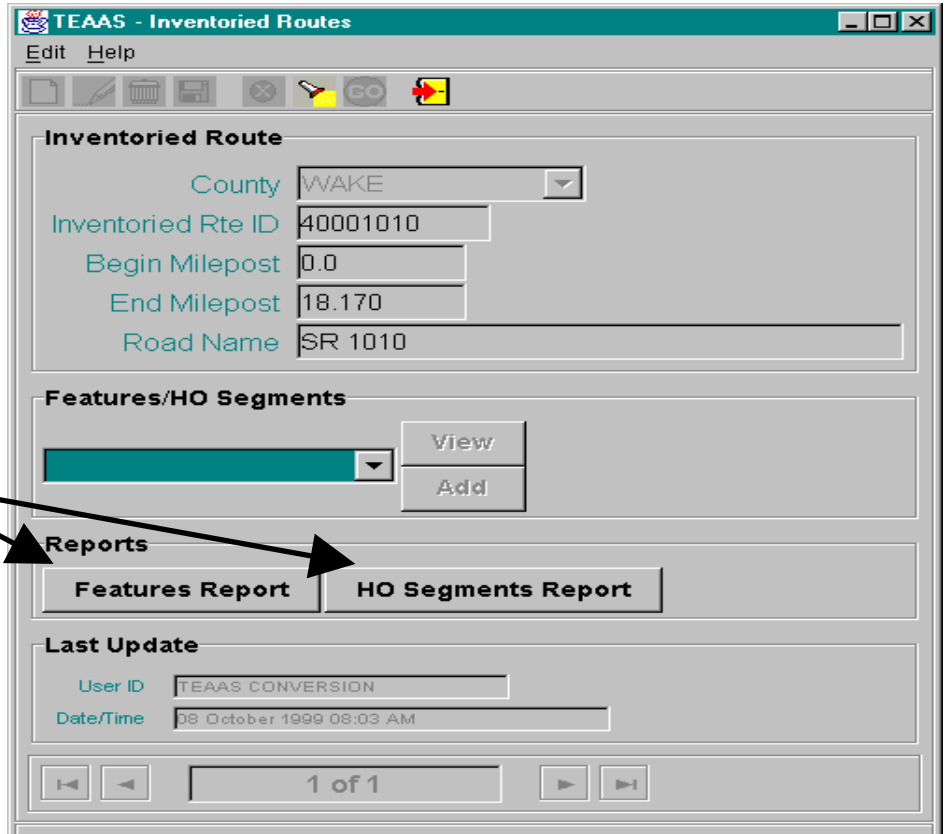
Inventoried Routes Example (cont.)

- Records show the county, 8-digit code (inventoried route ID), the beginning and ending mileposts, and the preferred text road name for all inventoried routes that met the specified criteria

- Records do not necessarily have mileposted features

- Possible additional data:
  - –Features Report
  - –HO Segments Report

Any available additional data will be in the Features Report and/or the High Order (HO) Segments Report



Dummy Route

- Used for studies that cross county lines
- Interstate 1 (10000001)
- Will not identify any crashes since the route does not exist
- All crashes and features (if a strip study) will need to be added